

Appl. No. : 09/987,232
Filed : November 6, 2001

AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-9, 13-15, 17-25, 32-40, and 43-44 without prejudice, as indicated below.

Please amend Claims 10, 16, 26, and 41, as indicated below.

A complete listing of all claims is presented below with insertions underlined (e.g., insertion), and deletions struckthrough or in double brackets (e.g., ~~deletion~~ or [[deletion]]):

1.-9. (Cancelled)

10. (Currently Amended) A thermoelectric element comprising:
at least two heterostructure thermoelectric portions of the same conductivity type;
an electrically conductive material coupled to the thermoelectric portions; and
~~The thermoelectric element of Claim 1, further comprising a bonding material~~
between the at least two ~~heterostructure~~heterostructure thermoelectric portions.

11. (Original) The thermoelectric element of Claim 10, wherein the bonding material is configured to reduce the power density of the thermoelectric.

12. (Original) The thermoelectric element of Claim 10, wherein the bonding material is configured to reduce shear stress in the layers when the thermoelectric element is operated.

13.-15. (Cancelled)

16. (Currently Amended) A thermoelectric element comprising:
at least two heterostructure thermoelectric portions of the same conductivity type;
and
an electrically conductive material coupled to the thermoelectric portions~~The~~
~~thermoelectric element of Claim 1, wherein the heterostructure~~heterostructure
thermoelectric portions are of substantially the same thermoelectric material.

17.-25. (Cancelled)

26. (Currently Amended) A thermoelectric element comprising:
at least two layers of substantially the same thermoelectric material and of the
same conductivity type;
at least one electrically conductive material coupled to the thermoelectric
material; and

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~~The thermoelectric element of Claim 18, further comprising a bonding material between the at least two layers.~~

27. (Original) The thermoelectric element of Claim 26, wherein the bonding material is configured to reduce the power density of the thermoelectric.

28. (Original) The thermoelectric element of Claim 26, wherein the bonding material is configured to reduce shear stress in the layers when the thermoelectric element is operated.

29. (Original) The thermoelectric element of Claim 28, further comprising an intermediate material between the at least one electrode and at least one layer of the thermoelectric material.

30. (Original) The thermoelectric element of Claim 29, wherein the intermediate material is configured to reduce shear stress in the layers when the thermoelectric element is operated.

31. (Original) The thermoelectric element of Claim 29, wherein the intermediate material is resilient.

32.-40. (Cancelled)

41. (Currently Amended) A method of producing a thermoelectric device comprising the steps of:

forming at least two layers of substantially the same thermoelectric material; and

connecting at least one electrode to at least one of the layers~~The method of Claim~~

40, wherein the step of forming comprises bonding said at least two layers with a bonding material.

42. (Original) The method of Claim 41, wherein said bonding material is configured to decrease power density.

43.-44. (Cancelled)